

Connecticut Department of Agriculture
Small Egg Processing Plant Inspection Program



Rules and Standards

Application

And

Inspection Report

In accordance with Section 22-48a of the Connecticut General Statutes, the Connecticut Department of Agriculture has established a Small Egg Processing Plant inspection program. The rules and standards to be applied to the participants in the Connecticut Department of Agriculture Small Egg Processing Plant Inspection Program are contained in this document.

The purpose of this program is to provide small egg producers who do not meet the criteria for inspection by the United States Department of Agriculture (USDA) with a regulatory inspection program that will satisfy State and local health department's requirements that eggs used in food service establishments come from an approved source and are safe.

Shell egg producers with more than 500 birds and less than 3000 birds are eligible.

**To obtain more information about our shell egg inspection program
Call 860-713-2513**

**For information concerning poultry disease surveillance and prevention programs,
National Poultry Improvement Plan programs and the requirements for importing
and exporting live birds or hatching eggs. Call 860-713-2504**

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Section 1

Standards for Egg Room Sanitation

RCSA 22-324-D1

Definitions

- 1) "Case" means when referring to containers, an egg case as used in commercial practice in the United States, holding thirty dozens of shell eggs.
- 2) "Condition" means any condition, including but not limited to, the state of preservation, cleanliness, soundness, wholesomeness, or fitness for human food, of any product which affects its merchantability.
- 3) "Plant" means any building, machinery, apparatus or fixture, used for the storing, grading of packing of shell eggs.
- 4) "Potable water" means water that has been approved by the State Department of Health, or any agency or laboratory acceptable to the Commissioner of Agriculture as safe for drinking and food processing.
- 5) "Premises" means a tract of land with building or part of building with its grounds or appurtenances.
- 6) "Product" or "products" means shell eggs of domesticated chicken.
- 7) "Shell eggs" means eggs of domesticated chickens.
- 8) "Shell protected" means eggs which have had a protective covering such as oil applied to the shell surface.
- 9) "AA Quality" means the shell must be clean, unbroken and practically normal. The air cell must not exceed one-eighth inch (3.2mm) in depth, may show unlimited movement, and may be free of bubbly. The white must be clear and firm, so that the yolk is only slightly defined when the egg is twirled before the candling light. The yolk must be practically free from apparent defects.
- 10) "A Quality" means the shell must be clean, unbroken, and practically normal. The air cell must not exceed three-sixteenths of an inch (4.8mm) in depth, may show unlimited movement, and may be free or bubbly. The white must be clear and at least reasonable firm, so that the yolk out-line is only fairly well defined when the egg is twirled before the candling light. The yolk must be practically free from apparent defects.
- 11) "B Quality" means the shell must be unbroken, may be abnormal, and may have slightly stained areas. Moderately stained areas are permitted if they do not cover more than one-thirty- seconded (0.8mm) of the shell surface if localized, or one-sixteenth (4.8mm) of the shell surface if scattered. Eggs having shells with prominent stains or adhering dirt are not permitted. The air cell may be over three-sixteenths inch (1.6) in depth, may show unlimited movement, and may be free or bubbly. The white may be weak and watery, so that the yolk outline is plainly visible when the eggs is twirled before the candling light. The yolk may appear dark, enlarged, and flattened, and may show clearly visible germ development, but no blood due to such development. It may show other serious

- defects that do not render the egg inedible. Small blood spots or meat spots (aggregating not more than one-eighth inch (3.2mm) in diameter) may be present.
- 12) "Dirty" means an individual egg that has an unbroken shell with adhering dirt or foreign material, prominent stains, or moderate stains covering more than one-thirty-second of the shell surface if localized, or one-sixteenth of the shell surface if scattered.
 - 13) "Check" means an individual egg that has a broken shell or a crack in the shell, but its shell membranes are intact and its contents do not leak.
 - 14) "Leaker" means an individual egg that has a crack or break in the shell and shell membranes to the extent that the egg contents are exuding or free to exude through the shell.
 - 15) "Loss" means an egg that is inedible, cooked, frozen, contaminated, sour, musty, or an egg that contains a large blood spot, large meat spot, bloody white, green white, rot, stuck yolk, blood ring, embryo chick (at or beyond the blood ring state), free yolk in the white, or other foreign material.
 - 16) "Restricted" means eggs classified as checks, dirties, incubator rejects, inedibles, leakers and loss.

Standards for Egg Room Sanitation

RCSA 22-324-D2

Physical requirements of plant

- A) The plant shall be free from strong foul odors, dust and smoke-laden air.
- B) The premises shall be free from refuse, rubbish, waste, other materials and conditions which constitute a source of odors or a harbor for insects, rodents and other vermin.
- C) The buildings shall be of sound construction kept in good repair, such as to prevent the entrance or harboring of vermin.
- D) Rooms shall be kept free from refuse, rubbish, waste materials, odors, insects and rodents, and from any conditions which may constitute a source of odors or engender insects and rodents. Materials and equipment not currently needed shall be handled or stored in a manner so as to not constitute a sanitary hazard.
- E) Doors and windows the open to the outside shall be protected against the entrance of flies and other insects. Doors and windows serving rooms where edible product is exposed shall be protected against the entrance of dust and dirt. All doors leading into rooms where edible product is processed shall be fitted with self-closing devices.
- F) Doors and other openings which are accessible to rodents shall be of rodent-proof construction.
- G) There shall be an efficient drainage and plumbing system for the plant and premises. All drains and gutters shall be properly installed with traps and vents. The sewerage system shall have adequate slope and capacity to readily remove all waste from the various processing operations. All floor drains shall be equipped with traps constructed so as to minimize clogging.
- H) The floors, walls, ceiling, partitions, posts, doors and other parts of a structure shall be of such materials, construction and finish as to permit their ready and thorough cleaning. The floors and curbing shall be watertight.
- I) Both the hot and cold water supplies shall be ample, clean and potable with adequate facilities for distribution throughout the plant or portion thereof utilized for egg processing handling operations and for protection against contamination and pollution.
- J) Each room and each compartment in which any shell eggs are handled or processed shall be so designed and constructed as to insure processing and operating conditions of a clean and orderly character, free from objectionable odors and vapors, and shall be maintained in a clean and sanitary condition.
- K) Every practicable precaution shall be taken to exclude dogs, cats and vermin including, but not limited to, rodents and insects, from the plant or portion thereof in which shell eggs are handled or stored.
- L) There shall be adequately lighted dressing rooms and toilet rooms, ample in size, conveniently located and separated from the rooms and compartments in which shell eggs are handled, processed, or stored, sufficient in number to accommodate the number of persons employed. The dressing rooms and toilet rooms shall be separately ventilated.

- M) Lavatory accommodations, including, but not limited to , hot and cold running water, towels, and soap which does not impart an odor which interferes with accurate evaluation of the product, shall be placed at such locations in the plant as may be essential to assure cleanliness of each person handling any shell eggs.
- N) Suitable facilities for cleaning and sanitizing utensils and equipment shall be provided at convenient locations throughout the plant.

Standards for Egg Room Sanitation

RCSA 22-324-D3

Equipment and utensils

- A) Equipment and utensils used in processing shell eggs shall be of such design, material and construction as will (1) enable the examination, segregation and processing of such products in an efficient, clean and satisfactory manner, and (2) permit easy access to all parts to insure thorough cleaning and sanitizing. So far as is practicable all such equipment shall be made of metal or other impervious material, if the metal or other impervious material will not affect the product by chemical action or physical contact. Receptacles and packages used for shell eggs which are not fit for human food shall bear some conspicuous and distinctive identification.

Standards for Egg Room Sanitation

RCSA 22-324-D4

Protection of Shell Eggs

- A) Shell eggs which are not fit for human consumption shall be placed in a conspicuously marked container and shall be treated in such manner as will preclude their use as human food.
- B) No product or material which creates an objectionable condition shall be processed, stored or handled in any room, compartment or place where any shell eggs are processed, stored or handled.
- C) Only germicides, insecticides, rodenticides, detergents or wetting agents or other similar compounds which will not deleteriously affect the egg products and which have been approved and listed in the U.S. Department of Agriculture list of Chemical Compounds, authorized for the use under the U.S.D.A. Poultry and Egg Products Inspection Program, may be used in the plant. The use of such compounds shall be in a manner satisfactory to the commissioner.
- D) Packages or containers for eggs shall be clean when being filled; and all reasonable precautions shall be taken to avoid soiling or contamination the surface of any package or container liner which is, or will be, in direct contact with such eggs. Only new containers or used containers that are clean and in sound condition shall be used for packaging eggs. (1) A used fiber case shall be construed to be good if it is reasonable clean and free from excessive stains and odors. Cases which have lost their original shape, due to warping, bulging, sagging or denting shall not be used. All seams shall be securely fastened without broken stitches or pulled staples. Hand slots and other parts of the case shall be free of tears. (2) Used fillers, flats and filler-flats shall be construed to be good if they are reasonably clean and sufficiently sound to permit the lifting of the layer of eggs from the case without losing eggs. They shall be free of mold, mustiness or off odor. (3) Any material which does not meet the definition of new, good, and used shall not be used.

Standards for Egg Room Sanitation
RCSA 22-324-D5
Candling and Transfer Room: Construction

- A) The candling and transfer room shall be so constructed that it can be adequately darkened to assure accuracy in removal of inedible or loss of eggs by candling. Equipment shall be arranged so as to facilitate cleaning and the removal of refuse and excess material.
- B) The construction of the floor shall allow thorough cleaning. In any building constructed after the effective date of the regulation, the floors shall be of water resistant composition and provided with proper drainage.
- C) Ventilation shall be such as to provide for the rapid removal of objectionable odors and dust, preferably by means of an exhaust fan.
- D) Candling devices of an approved type shall be provided to enable candlers to detect inedible, dirty or checked eggs, and eggs other than chicken eggs.
- E) Leaker trays shall be made of such material and design as to be conducive to easy cleaning and sanitizing.
- F) Containers made of a material and design conducive to easy cleaning and sanitizing shall be provided for inedible eggs. All such containers shall be conspicuously marked.
- G) Containers made of a material and design conducive to easy cleaning and sanitizing shall be provided for trash unless clean disposable containers are furnished daily.
- H) Shell egg conveyors shall be constructed so that they can be thoroughly cleaned.

Standards for Egg Room Sanitation
RCSA 22-324-D7
Candling and Transfer Room: Cleanliness

- A) Candling and transfer rooms shall be kept clean and free from cobwebs, dust, objectionable odors and excess packing materials.
- B) Floors, benches, and conveyors shall be cleaned as often as necessary to maintain clean operation but at least once daily.
- C) Mechanical candling machines shall be maintained in a clean condition during operations.
- D) Containers for trash and inedible eggs shall be removed from the candling room as often as necessary but at least once daily and shall be cleaned and treated in such a manner as will avoid off odors or objectionable conditions in the plant.

Standards for Egg Room Sanitation

RCSA 22-324-D7

Cooler Room Requirements. Shell Egg Protecting and Cleaning Operations.

- A) **Cooler room requirements:** Shell eggs shall be held under refrigeration meeting the following requirements:
- (1) Cooler rooms shall have refrigeration facilities capable of reducing within forty-eight hours and holding the maximum volume of eggs handled to 45° F or below. Accurate thermometers shall be provided.
 - (2) Cooler rooms shall be free from objectionable odors and from mold and shall be maintained in a sanitary condition.
- B) **Shell egg protecting operations:** Shell eggs protecting (oil processing) operations shall be conducted in a manner to avoid contamination of the product and maximize conservation of its quality.
- (1) Oil having off odor, or that is obviously contaminated, shall not be used in shell egg protection
 - (2) Processing oil that has been previously used and which has become contaminated shall be filtered and heat treated at 180° F for three minutes prior to use.
- C) **Shell egg cleaning operations**
- (1) Shell egg cleaning equipment shall be kept in good repair and shall be cleaned after each day's use or more frequently if necessary.
 - (2) Waste water from the egg washing operation shall go directly to a drain.
 - (3) Continuous-type washers shall have a complete water change at least once during each day and at the end of each day or more frequently.
 - (4) Bucket type washers shall have a complete water change after every five baskets
 - (5) Wash water used shall be at least 20° F warmer than the eggs. The minimum maintained temperature of the wash water shall be 90° F. The twenty degree differential shall be maintained throughout the cleaning cycle. Pre-wetting by submersion shall not exceed five minutes.
 - (6) During any rest period, eggs shall be removed from the washing and rinsing area of the egg washer and from the scanning area whenever there is a buildup of heat.
 - (7) Only Consumer and Marketing Service, U.S.D.A. approved list cleaning and sanitizing compounds revised April 2006, and as subsequently amended may be used. The use of metered equipment for dispensing the compounds into solution is recommended.
 - (8) The entire shell egg cleaning and drying operation shall be continuous and shall be completed as rapidly as possible.
 - (9) Only potable water may be used to wash eggs.
 - (10) Where practicable all washed eggs shall be spray rinsed with warm, potable water which contains sanitizing compound. Rinse water should be 10° F warmer than wash water. The strength of the sanitizing rinse should be no less than 50 p/m nor more than 200 p/m of chlorine or its equivalent.

(11)Washed eggs shall be reasonably dry before cartooning or casing.

Section 2

Consumer Standards, Grades and Weight Classes for Shell Eggs

The Connecticut Department of Agriculture will enforce USDA Standards for grading to Grade B or better. The following is taken from USDA requirements.

- (1) Consumer Grade AA shall consist of eggs that are at least 87 percent AA quality. The maximum tolerance of 13 percent that may be below AA quality may consist of A or B quality in any combination, except that within the tolerance for B quality, not more than 1 percent may be B quality due to air cells over three-eighths inch (9.5mm), blood spots aggregating not more than one-eighth inch (3.2mm) in diameter, or serious yolk defects. Not more than 5 percent (7 percent for Jumbo size) checks are permitted and not more than 0.5 percent leakers, dirties, or loss (due to meat or blood spots) in any combination, except that such loss may not exceed 0.3 percent. Other types of loss are not permitted.
- (2) Consumer Grade A shall consist of eggs that are at least 87 percent A quality or better. Within the maximum tolerance of 13 percent that may be below A quality, not more than 1 percent may be B quality due to air cells over three-eighths inch (9.5mm), blood spots aggregating not more than one-eighth inch (3.2mm) in diameter, or serious yolk defects. Not more than 7 percent (9 percent for Jumbo size) checks are permitted and not more than 1 percent leakers, dirties, or loss (due to meat or blood spots) in any combination, except that such loss may not exceed 0.3 percent. Other types of loss are not permitted.
- (3) Consumer Grade B shall consist of eggs that are at least 90 percent B quality or better, not more than 10 percent may be checks, and not more than 0.5 percent leakers, dirties, or loss (due to meat or blood spots) in any combination, except that such loss may not exceed 0.3 percent. Other types of loss are not permitted.
- (4) Additional tolerances in lots of two or more cases: For grade AA- No individual case may exceed 10 percent less AA quality eggs than the minimum permitted for the lot average. For grade A- No individual case may exceed 10 percent less A quality eggs than the minimum permitted for the lot average. For grade B- No individual case may exceed 10 percent less B quality eggs than the minimum permitted for the lot average. For grades AA, A, and B, no lots shall be rejected or downgraded due to the quality of a single egg except for loss other than blood or meat spots.

Weight Classes of Consumer Grades for Shell eggs

Size or weight class	Minimum net weight per dozen (oz)	Minimum net weight 30 per dozen (lbs)	Minimum net weight for individual eggs at rate per dozen (oz)
Jumbo	30	56	29
Extra Large	27	50.5	26
Large	24	45	23
Medium	21	39.5	20
Small	18	34	17
Peewee	15	28	--

- (5) Nest Run _% AA Quality shall consist of eggs of current production of which at least 20 percent are AA quality; and the actual percentage of AA quality eggs shall be stated in the grade name. Within the maximum of 15 percent that may be below A quality, not more than 10 percent may be B quality for shell shape, for interior quality (including meat or blood spots), or due to rusty or blackish appearing cage marks or blood stains; not more than 5 percent may have adhering dirt or foreign material on the shell one-half inch (12.7mm) or larger in diameter; not more than 6 percent may be checks; and not more than 3 percent may be loss. Marks that are slightly gray in appearance and adhering dirt or foreign material on the shall less than one-half inch (12.7mm) in diameter are not considered quality factors. The eggs shall be officially graded for all other quality factors. No case may contain less than 75 percent A quality and AA quality eggs in any combination.

Weight Classes of Nest Run Grade for Shell eggs

Size or weight class	Minimum average net weight on lost basis 30-dozen cases
Class XL	51
Class 1	48
Class 2	45
Class 3	42
Class 4	39

Summary of Nest Run Grade for Shell Eggs

	Nest run grade, description	U.S. nest run percent AA quality
Minimum percentage of Quality required (lot average)	AA Quality	20
	A quality or better	85
Maximum percentage tolerance permitted (15 percent lot average)	B quality for shell shape, pronounced ridges or thin spots, interior quality (including blood & meat spots) or cage marks and blood stains	10
	Checks	6
	Loss	3
	Adhering dirt or foreign Material ½ inch or larger in diameter	5

Inspection and Disposition of Restricted Eggs

- 1) Prohibition on disposition of restricted eggs
 - a. No person shall buy, sell, or transport, or offer to buy or sell, or receive for transportation in any business in commerce any restricted eggs, except as authorized by the Commissioner of Agriculture.
 - b. No egg handler shall possess any restricted eggs, except as authorized by the Commissioner of Agriculture.
 - c. No egg handler shall use any restricted eggs in the preparation of human food except as provided under "Disposition of restricted eggs".
- 2) Disposition of restricted eggs
 - a. Eggs classified as restricted shall be disposed of by one of the following methods at point and time of segregation.
 - b. By shipping directly or indirectly to an official egg products processing plant for segregation and processing, if labeled check or dirty then inedible and loss eggs are not intermingled in the same container with checks and dirties.

- c. Loss and inedible eggs shall be crushed and shall be placed in a container containing a sufficient amount of approved denaturant or decharacterant substance, as approved the Commissioner of Agriculture.
- d. The denatured and decharacterized product shall be properly labeled.
- e. By processing for industrial use or for animal food. Such product shall be denatured or decharacterized, labeled and handled with procedures approved by the Commissioner of Agriculture.
- f. Eggs which are packed for the ultimate consumer and which have been found to exceed the tolerance for restricted eggs permitted in the official standards for Consumer Grade B shall be properly identified as Not For Sale For Human Food, Under Grade and shipped directly or indirectly to an official egg processing plant for proper segregation and processing; or be regarded so that they comply with official standards; or used as other than human food. Records shall be maintained to assure proper disposition.

3) Retention

- a. Retention tags or other devices and methods as may be approved the Commissioner of Agriculture shall be used for the identification and control of products which are not in compliance with the regulations or are held for examination. No product shall be released for use until it has been made acceptable. Such identification shall not be removed by anyone other than an inspector.

4) Inspections

- a. Inspection of eggs shall be rendered pursuant to these regulations and under such conditions and in accordance with such methods as may be prescribed or approved by the Commissioner of Agriculture.
- b. Periodic inspections shall be made of business premises, facilities, inventories, operations, transport vehicles, and records of egg handlers, and records of all persons engaged in the business of transporting, shipping, or receiving any eggs. In the case of shell egg packers packing eggs for ultimate consumer, such shell egg surveillance inspections shall be made a minimum of once each calendar quarter. In the case of shell egg processing plant sanitation inspection shall be semi-annually.

Section 3

Labeling

Labels shall comply with FDA regulations and include the “safe handling” statement.

“SAFE HANDLING INSTRUCTIONS To prevent illness from bacteria: keep eggs refrigerated, cook eggs until yolks are firm, and cook foods containing eggs thoroughly .”

In addition to the safe handling instructions the label shall include:

- CT Shell Egg Plant Number
- Name and address of the manufacturer, distributor or packer
- The name of the food
- The net quantity

Section 4

Other Dept. of Agriculture Programs

Salmonella is a pathogen frequently found in eggs. Shell egg producers can participate in a Dept. of Agriculture program to monitor your flock environment for the presence of Salmonella.

Avian influenza and the risk it poses to the Connecticut poultry industry is an important concern of the Dept of Agriculture. The Dept. has an avian influenza surveillance program for poultry owners that provides for testing at no or low cost.

**To obtain more information about our shell egg inspection program
Call 860-713-2513**

**For information concerning poultry disease surveillance and prevention programs,
National Poultry Improvement Plan programs and the requirements for importing
and exporting live birds or hatching eggs. Call 860-713-2504**

Section 5

Program Documents